

Application No.: 10/693,077

Docket No.: 27592-00362-US11

**AMENDMENTS TO THE CLAIMS**

This Listing of Claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

1.-24. (Canceled)

25. (Currently Amended) An information backup system comprising:

a plurality of computer systems, each comprising a disk subsystem and a network interface, wherein each of said computer systems is to be coupled to a network to provide communications among the plurality of computer systems;

a functionally coherent and physically distributed cache memory comprising a plurality of memory portions, each within a memory of a computer system among said plurality of computer systems; and

a functionally coherent and physically distributed disk storage device comprising a plurality of disk storage portions, each within the disk subsystem of a computer system among said plurality of computer systems,

wherein at least one computer system has a bridge driver configured to handle communications ~~for communications~~ between its associated network interface and its associated disk subsystem and memory portion, and

wherein any portion of said distributed cache is to be accessible to any computer system with a bridge driver connected to the network, independent of the computer system's location.

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26. (Previously Presented) The system of claim 25 wherein said functionally coherent and physically distributed cache memory is to operate as a data cache for said functionally coherent and physically distributed disk storage device.

27.-29. (Canceled)

30. (Previously Presented) The system of claim 25 wherein said functionally coherent and physically distributed disk storage device is to be configured as a functionally coherent and physically distributed redundant array of independent disks (RAID) storage device.

31. (Previously Presented) The system of claim 25 wherein said memory portions comprise portions of volatile random access memories of said plurality of computer systems.

32.-36. (Canceled)

37. (Currently Amended) A method for operating an information backup system comprising:

organizing into a unified logical disk storage device at least one disk storage portion from a plurality of computer systems of a network, the unified logical disk storage device being accessed by any of said plurality of computer systems; and

caching information sent to or obtained from the unified disk storage device using a distributed cache memory comprising a plurality of memory portions, each within a memory of a computer system among said plurality of computer systems; and

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accessing the unified disk storage device and distributed cache memory via a bridge driver configured to handle communications between an associated network interface and an associated disk subsystem and memory portion, wherein any portion of said distributed cache is accessible to a computer system connected to the network independent of the computer system's location.

38.-40. (Canceled)

41. (Previously Presented) The method of claim 37 further comprising configuring said distributed disk storage device as a distributed redundant array of independent disk (RAID) storage device:

42. (Previously Presented) The method of claim 37 in which at least some of the memory portions comprise portions of volatile random access memories of said plurality of computer systems.

43. (Canceled)

44. (Currently Amended) An information backup system comprising:  
a plurality of computer systems to be communicatively coupled to a communication network;  
a distributed cache memory comprising a plurality of memory portions, each memory portion being a portion of a memory of a computer system among said plurality of computer

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systems, said memory portions being organized to function as a single coherent cache memory;  
and

a distributed disk storage device comprising a plurality of disk storage portions, each disk storage portion being a portion of disk storage of one or more computer systems among said plurality of computer systems, said disk storage portions being organized to function as a single disk storage device, wherein said computer systems are to access said distributed disk storage device as a single logical disk, and wherein any portion of said distributed cache memory is to be accessible to any computer system with a bridge driver connected to the network independent of the computer system's location and is to be operable as a cache memory for said distributed data storage device, wherein the bridge driver is configured to handle communications between an associated network interface and an associated disk subsystem and memory portion.

45. (Currently Amended) An information backup system comprising:

a plurality of computer systems;

each computer system among at least a first subset of said computer systems having first means for performing distributed caching, wherein each first means is to provide a portion of memory from its corresponding computer system, wherein all of said first means are to cooperate to provide a unified distributed system cache memory from among said portions of memory, wherein any portion of said distributed system cache memory is to be accessible to any computer system with a bridge driver connected to the network independent of the computer system's location; and

each computer system among said first subset further having second means for performing distributed disk storage, wherein each second means is to provide a portion of disk

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storage of a disk storage device from its corresponding computer system, wherein all of said second means are to cooperate to provide a distributed disk storage device, wherein said computer systems are to access said distributed disk storage device as a single logical disk,  
wherein the bridge driver is configured to handle communications between an associated network interface and an associated disk subsystem and memory portion.

46. (Currently Amended) A method for an information backup system comprising a plurality of computer systems, the method comprising:

each computer system among said plurality of computer systems providing a portion of its random access memory, collectively referred to as a plurality of memory portions;

organizing said memory portions into a unified distributed cache memory;

each computer system among said plurality of computer systems providing a portion or portions of one or more of its disk storage devices, collectively referred to as a plurality of disk storage portions, and

organizing said plurality of disk storage portions into a distributed disk storage device;

and

providing access to said distributed storage device, wherein any of said plurality of computer systems can access said distributed disk storage device as a single logical disk; and

caching information sent to or obtained from the distributed disk storage device using the distributed cache memory, wherein any portion of said distributed cache memory is accessible to any computer system with a bridge driver connected to the network independent of the computer system's location.

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wherein the bridge driver is configured to handle communications between an associated network interface and an associated disk subsystem and memory portion.